

# PLANTING GUIDE for JAPANESEMILLET

*Echinochloa frumentacea* (Roxb.) Link



**DESCRIPTION:** An annual warm season grass that varies in height from one to eight feet or more, depending on variety, seed source, and planting site. It is a bunch grass that stands erect, is leafy, with both basal leaves and flag leaves. When grazed or cut, it tillers (puts out new shoots) vigorously.

**VARIETIES:** Chiwapa Japanese millet, a variety adapted to the South, has been developed at the Coffeeville, Mississippi Soil Conservation Service Plant Materials Center. Seed are available in limited supply.

Commercial sources of Japanese millet without variety designations have long been available in the northeast and northern lake states. Some of the seed from these sources are satisfactory for use in the South, and some are not. Results from seed obtained from these sources are unpredictable.

**USE:** The plant is useful for temporary grazing or hay. It has special value as food for waterfowl, doves, and quail.

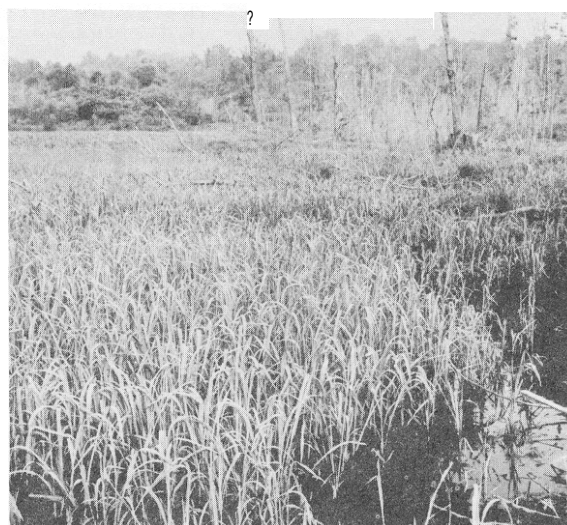
**SOIL ADAPTATION:** Japanese millet is best adapted to wet land. With high rainfall it can be grown on upland well-drained soils. Yields on these soils will depend on the water supply. As a hay or grazing crop, select the wettest sites that can be worked. For waterfowl food patches, select sites that can be flooded from 1 to 18 inches deep.

**CLIMATIC ADAPTATION:** One variety, Chiwapa, has been developed for the South, and some of the undesigned varieties available from northern sources do well on adapted southern sites. Most undesigned varieties of Japanese millet, however, are best suited to the north temperate zone.

**METHODS OF ESTABLISHMENT:** These suggested methods may be employed:

1. Broadcast seed at the rate of 20 pounds per acre on a prepared seedbed and harrow in. Cover should be less than one inch.
2. Drill in rows at ten pounds per acre on a prepared seedbed.
3. Broadcast 20 pounds per acre on mud flats of partially-drained ponds or lakes, but do not cover. Seed should not be covered by water while germinating, but after starting growth, the plants will tolerate flooding one-fourth to one-half their height.

**PLANTING TIME:** Chiwapa matures in about 120 days. Schedule planting to coincide with desired maturity date. Generally seeding can be done at any time after the danger of frost is over in the spring through July.



**CULTIVATION:** No cultivation is required on most sites. Where drilled in wide rows, cultivation will improve yields.

**FERTILIZATION:** Use the suggestions of a soil test as a guide. On low-fertility sites where a soil test is not available use a complete fertilizer such as 8-8-8 at about 400 pounds per acre on prepared land. All sites should be top dressed at rates up to 100 pounds of N per acre.

**MANAGEMENT:**

**GRAZING:** Practice rotation grazing, maintain a stubble height of eight to ten inches, and as far as possible, avoid grazing when the soil is excessively wet.

**HAY:** Maintain a high soil-water content until the plants are ready to boot, then dry the soil and cut in the booting stage.

**FOR WATERFOWL:** Plant in an area that can be flooded. After germination, keep the site wet. At about the booting stage, or about two weeks before waterfowl are expected, flood 6 to 24 inches deep. Maintain this depth throughout the use season.

**FOR DOVES AND QUAIL:** Plant on upland sites in wide (36 to 42 inch) rows.

**FOR SEED:** Allow to mature, then combine direct.

**OTHER INFORMATION:** Japanesemillet seed should be relatively clean, have a purity of 80 to 85 percent, and a germination of 70 to 85 percent.

The plant will volunteer on most sites if provided proper conditions, and if seed are "left over" to volunteer. Volunteering can be improved by (1) scarifying the soil between seed maturity and the following germinating season, and (2) on wetlands, drain and maintain low level of water until after germination. Volunteer stands cannot be managed to mature seed at a given time as easily as planted stands.

Barnyardgrass (*Echinochloa crusgalli* (L.)

Beauv.) and junglerice (*Echinochloa colonum* (L.) Link) are readily available substitutes for Japanesemillet. Commercial sources of barnyardgrass without variety distinction are the same as for Japanesemillet. Baldwin junglerice is an adapted variety available for southern conditions.

It is often desirable to plant two kinds of these grasses in the same location for waterfowl. Differences in maturity time, acceptability to grain-feeding birds, or other reasons may work to assure feed even though one kind may fail,

